

## NOTES FROM THE BOTANIC GARDENS, SYDNEY.

No. 17.

BY J. H. MAIDEN AND E. BETCHE.

## SIMARUBEÆ.

CADELLIA PENTASTYLIS, n.sp.

Along dry water-courses, Eulah Creek, 17 miles east of Narrabri (District Forester E. H. F. Swain: November, 1911).

A new and unexpected locality for a rare tree. It has hitherto been recorded from New South Wales only from the Severn River, New England. Mr. F. M. Bailey records it from Southern Queensland, "near the border of New South Wales," but with no definite locality.

According to Mr. Swain's report, it is a tree about 40 feet high, with a red, very hard wood.

## LEGUMINOSÆ.

ACACIA RUPPII, n.sp.

Copmanhurst, Coaldale Road (Clarence River District), (Rev. H. M. R. Rupp; August and September, 1909, in flower; October, 1911, with unripe fruits).

Frutex erectus, 6-10' altus, ramulis pubescentibus. Phyllodia fere glabra, conferta et raro irregulariter verticillata, linearia, circiter 2-2½ cm. longa et 4 mm. lata, apice rotundata, mucrone obliquo vel laterali innocuo terminata, una vena indistincta longitudinali. Stipulæ minutæ. Flores in racemis phyllodia longe superantibus, capitulis circiter 4-8 in pedunculis gracilibus pubescentibusque. Capitula 20-25 floris, sepalis petalisque liberis vel linitè cohaescentibus, petalis quam sepales duplo longioribus, omnibus leniter pubescentibus. Semina et siliqua non mura detecta. Siliqua immatura plana, linearis, circiter 8 cm. longa et 6 v. 7 mm. lata. Semina 6-9 longitudinaliter sita.

An erect rather sparingly branched shrub, up to 10 feet high, the young branches and inflorescence pubescent with short soft spreading hairs. Phyllodia crowded, scattered and occasionally irregularly verticillate, slightly sprinkled with hairs, chiefly on the edges, or almost glabrous, from 7 lines to nearly 1 inch long and barely 1 line broad, narrowed at the base and rounded at the top, ending with a small oblique or lateral innocuous point, with a single scarcely visible vein near the upper margin and generally with a very inconspicuous small gland near the base of the upper margin. Stipules minute. Bipinnate juvenile leaves with a single pair of pinnae, each with 6 to 8 pairs of leaflets, occasionally found on apparently full-grown flowering specimens. Flowers in racemes much exceeding the phyllodia, of few to rarely above 8 heads on slender peduncles. Flower-heads with about 20 or more 5-merous flowers. Petals free or slightly cohering, about twice as long as the sepals, all slightly hairy. Pod stipitate, flat, linear, generally curved, 3 to 4 inches long and hardly  $\frac{1}{4}$  inch broad, with thickened margins. Seeds 6 to 9 in the pod, placed longitudinally and alternately impressed on each side, but pods and seeds seen only in an immature state.

The affinities of this new *Acacia* are with *A. conferta* A. Cunn., though it is the only species in Bentham's series *Brunioideæ* with a racemose inflorescence. Unfortunately we have not been able to obtain full-grown pods and ripe seeds: the pods are too immature to show the arillus of the seeds, but they show distinctly that the seeds are placed longitudinally, while they are placed transversely in *A. conferta*.

The bipinnate leaves are quite a prominent character of this species. Mr. Rupp writes that he does not recollect seeing a plant which had not both leaves and phyllodia together, except when very young, and then it had leaves only; even the tallest shrubs bore leaves quite freely, though the phyllodia are more prominent in the general aspect of the plant.

## SAXIFRAGEÆ.

ACKAMA MUELLERI BENTH., var. HIRSUTA, n. var.

Dorrigo District (District Forester Wilshire: June, 1904: Forest Guard R. Lowe: August, 1904, and May, 1905: J. L. Boorman: May, 1909: District Forester E. H. F. Swain: May, 1910).

Branchlets, rhachis of the pinnate leaves and principal veins on the underside of the leaves densely covered with short, spreading, pale-brown hairs, more sparingly hairy on the smaller reticulate veinlets. Upper side of the leaves quite glabrous, or with hairs on the midvein only or sparingly sprinkled with hairs even on the reticulate veinlets.

This is apparently the form mentioned by Mueller in *Fragm. vi.*, p. 188, from Camden Haven, Macleay River and Bellinger River, but it is such a very distinct form, that it should be constituted a named variety, in our opinion. It seems to be confined to the coast district and mountain-ranges from Camden Haven to the Bellinger River, or from about 30° to 32° S. lat. It does not seem to extend into Queensland, so far as we know.

## UMBELLIFERÆ.

TRACHYMENE CLELANDI, n. sp.

Berowra Creek, Hawkesbury River (Dr. J. Burton Cleland: February, 1911: J. L. Boorman: May, 1911).

Frutex densus, ramosus, divaricatus, 1-2' altus, ramis juvenilibus hispidis. Folia ample flabelliformia, dentatis marginibus superioribus orbiculatis, maxima 6-7 mm. lata, et longitudine breviora, in breviori petiolo angustata, atrovirentia supra, pallidiora infra, parce hispida. Flores in parvis terminalibus umbellis compositi, 2-3 cm. diametro, radiis, pedicellis fructibusque hispidis. Calycis dentes inconspicui. Fructus 2 mm. longi et idem lati, costis vix conspicuis.

A divaricately branched, scrambling shrub forming intricate masses, and attaining 1 to 2 feet in height, the young

branches densely covered with short, rigid spreading bristles, which are slightly flattened and almost scale-like. Leaves numerous, somewhat distichously arranged, fan-shaped, the rounded outer margin dentate with 7 to 9 nearly triangular teeth, the sides entire and narrowed into a short slender petiole, the largest leaves about 6 or 7 mm. broad and somewhat less long, on a petiole hardly 1 mm. long, dark green and nearly glabrous on the upper surface, paler and sparingly bristly on the underside. Umbels compound, terminal on the slender scrambling branches, shortly pedunculate, generally with 5 rays supported by the small linear involucrel bracts, each ray bearing 5 or more fruits on short pedicels, the whole umbel 2 to 3 cm. in diameter; the rays, pedicels, fruits, and even involucrel bracts covered with the scale-like bristles of the stems. Calyx-teeth inconspicuous. Fruits about 2 mm. long and broad, the ribs scarcely conspicuous but much concealed by the short bristles covering them.

This remarkable new *Trachymene* was discovered by Dr. Cleland, in February, 1911, but his specimens were in early bud and too imperfect for determination. Mr. Boorman collected complete material, being directed to the locality by Dr. Cleland in May, 1911. It grows amongst huge sandstone boulders, on the Berowra Creek, on the Hawkesbury River, and does not seem to be by any means plentiful.

It is a well marked species, but its affinities are distinctly with *T. Billardieri*. The typical *T. Billardieri*, erect, glabrous, and with entire leaves, differs widely from the new species, but affinities can be found in its numerous forms. The variety *cuneata*, from the Snowy River, comes nearest to it, and forms a distinct connecting link: it has a divaricate habit, is slightly scabrous all over, and has cuneate leaves, though smaller and entire. The toothed leaves of *T. Stephensoni*, which is after all only a form of *T. Billardieri*, also connect the two species.

## COMPOSITÆ.

*HELICHRYSUM LEDIFOLIUM* Benth. New for N. S. Wales.

Bimberi Peak, Upper Cotter, Queanbeyan, at an elevation of 6200 feet (R. H. Cambage; January, 1912).

The species has been previously recorded only from Tasmania, and is closely allied to some forms included by Bentham and Mueller in *H. rosmarinifolium* Less.; but Mr. Cambage's specimens agree so closely with the type-specimens from Gunn's Herbarium of Tasmanian plants, that it can be classed only with *H. ledifolium*.

## EPACRIDACEÆ.

In "Kew Bulletin," 1910, No. 7, p. 213, Dr. O. Stapf has subdivided what has passed, in herbaria, under *Epacris heteronema* Labill., into four species, viz.—*E. heteronema* Labill., *E. breviflora* Stapf, *E. Bawbawiensis* Stapf, *E. Stuartii* Stapf.

We have examined the "*heteronema*" specimens in the National Herbarium, Sydney, and find that the following localities may be added to those given by Stapf:—

*E. breviflora* Stapf.—New South Wales: Rydal to Fish River and Sidmouth Valley (J. H. Maiden and R. H. Cambage; April, 1909); Sunny Corner (J. L. Boorman; November, 1899, J. H. M.); Braidwood (R. H. Cambage; No. 2060; November, 1908); Boonoo Boonoo (J. L. Boorman; November, 1904); Round Mountain, Guy Fawkes (J. L. Boorman; December, 1909); Glen Innes (W. J. Campbell; November, 1902); Quartzville (W. Forsyth; November, 1900); Walcha District (J. F. Campbell; November, 1899); Coree, Queanbeyan, 3000 feet (R. H. Cambage; No. 3330); Cockatoo, near Germanton (W. Forsyth; November, 1900)

Victoria: Strathbogie (A. W. Vroland; November, 1901); [E. Cheel].

## CONVOLVULACEÆ.

PORANA SERICEA F.v.M. New for New South Wales.

Cobar (Archdeacon F. E. Haviland; October, 1911).

The species has hitherto been recorded only from Western Australia and Northern Australia. The new locality, Cobar, suggests that its range extends across Australia to the west and north coast, though it is not mentioned in Bailey's "Queensland Flora," nor in Tate's "Flora of South Australia."

## THYMELEÆ.

PHALERIA NEUMANNI F.v.M.

Brushy Mountain, near Gloucester (J. H. Maiden; September, 1897).

Queensland is given as the habitat of this plant in Mueller's Census: we recorded it for New South Wales in 1906, from specimens collected at Acacia Creek, Macpherson Range, on the border of Queensland. This new locality brings its range about 150 miles further south. The specimens are in bud only, and the flower-heads are enclosed in two broad involueral bracts. The number of involueral bracts should be 4 to 6, according to Bentham's description; but the foliage and habit of the Brushy Mountain specimens are so exactly identical with the Acacia Creek specimens, that we think we can safely regard it as a form of *P. Neumannii* with fewer involueral bracts.

## CYPERACEÆ.

CYPERUS FERAX Rich. New for New South Wales.

Sugar Loaf Mountain, near Braidwood (J. L. Boorman; March, 1909); Milton (R. H. Cambage; January, 1912).

Previously recorded from Queensland only. It seems remarkable to find a species hitherto known only from tropical Queensland, in such comparatively cold places as Braidwood and Milton:

but our specimen from Cairns agrees, in every respect, with the New South Wales specimens, except that they are a trifle more robust.

### GRAMINEÆ.

*DIPLACHNE PEACOCKII* Maiden & Betche. New for Queensland.

Warwick, Queensland(J. L. Boorman; March, 1911).

Described in the "Agricultural Gazette of N. S. Wales," xv., 925(1904), from specimens collected at Coolabah, N.S.W. This is the second locality recorded.

*ERAGROSTIS TRICHOPHYLLA* Benth. New for New South Wales and Queensland.

Coolabah, N.S.W.(J. L. Boorman; June, 1901); Waverley Downs, N.S.W.(A. W. Mullen; April, 1906); Jericho, 300 miles west of Rockhampton, Queensland(R. Simmons; January, 1908).

Previously recorded from South Australia only.

*ERAGROSTIS SPECIOSA* Steud. New for New South Wales.

Narrabri; in dry, sandy water-courses in the Pilliga scrub(Dr. J. Burton Cleland; January, 1912).

Previously recorded from South and Western Australia, Queensland, and North Australia.

### *SCHISMUS FASCICULATUS* Beauv.

Thackaringa(J. M. Carne; December, 1910); Purnamoota, 20 miles north of Broken Hill(J. M. Bläck; October, 1891).

A South African grass naturalised in the north-western districts of New South Wales. The synonymy of the grass is rather confusing. *Schismus marginatus* Beauv., is the name for it in the Index Kewensis, but Dr. Stapf describes it in Vol.vii., p.693, of the Flora Capensis, under the name of *S. fasciculatus*, and gives *S. marginatus* as a synonym.

It is a very variable grass, and this accounts for the numerous synonyms. Our Thackaringa specimens are small, rigid plants much of the habit of *Diplachne loliiformis* F.v.M.; while South

Australian specimens, kindly presented to the Sydney Herbarium by Mr. J. M. Black, are much more flaccid and have a different aspect.

### CYCADEÆ.

#### MACROZAMIA MOOREI F.V.M.

Head of Clarence River (Mr. David Cox, of Ramornie Meat Works, per Chief Inspector of Stock; July, 1911).

This species is recorded as a New South Wales plant in the "Handbook of the Flora of New South Wales," from hearsay only, *i.e.*, from a report of Mr. A. Rudder that he had seen the species on the eastern slopes of the tableland, north-west of Grafton. Mr. Cox's specimens confirm Mr. Rudder's statement, and we have Mr. Cox's specimens in the National Herbarium, Sydney.

### FILICES.

#### HYMENOPHYLLUM MARGINATUM Hook. et Grev.

Under wet cliffs, on rocks, within spray of Horse-shoe Falls, Blackheath, Blue Mountains (Rev. W. W. Watts; January, 1911).

This was, perhaps, the rarest Australian fern, when Bentham published the seventh volume of the *Flora Australiensis* in 1878, but the precise locality had been lost. The only specimens known at the time, were collected by Charles Fraser, about 1825, and the locality given was "Port Jackson or vicinity."

In 1884, Mr. W. Baeuerlen collected it at Milton, N.S.W. (these *Proceedings*, Vol. viii., p.469), and established the first precise locality for New South Wales; Mr. Watts was fortunate enough to find a second locality, that may be identical with Mr. Fraser's original locality, which is one, we know, he visited.

#### PLANT OTHER THAN FROM NEW SOUTH WALES.

### LEGUMINOSÆ.

#### ACACIA LEPTOPHLEBA F.V.M.

Napier Broome Bay, North-West Australia (G. F. Hill, per A. J. Campbell; 1910).

The pods of this *Acacia* were not known, when the second volume of Bentham's *Flora Australiensis* was published, and they have not been described since, so far as we know: therefore, we add here the following short description:—

Pods linear-lanceolate, slightly falcate, 5 cm. long in the only, not fully matured pod seen, and  $\frac{1}{2}$  cm broad, flat, but with very prominently raised margins, so that the sides of the valves appear sunk: sides smooth, but obliquely striate. Seeds not seen. The pods are very much like those of *A. gouccarpa* F.v.M., in the Series *Julifloræ*, and *A. tetragonocarpa* in the Series *Calamiformes*.